A Proposed Free and Open Source Typeface

IT IS CRITICAL THAT WE DO NOT IGNORE THE IMPORTANCE OF TYPE IN the development of libre ecosystems. Typography has always been a stubborn holdout in this regard, and to this day there remain few free typefaces of professional typographic text quality. Free type is mainly concentrated in a handful of flagship "superfonts" that contain a staggering catalog of *glyphs*, but lack gravity in the quality of design and typographic styles and features seen in professional type. To my knowledge, there are currently just two great open source text families—Gentium, which is still incomplete, and *Linux Libertine*, in addition to a few corporate gifts such as *Adobe Source Serif* and *Bitstream Charter*. To help fill the gap, I present my own original type design and ask for the Wikimedia projects' help in finishing and releasing my font to provide a quality free font choice.

What is this font?

THE FONT I AM DESIGNING (AND THAT YOU ARE CURRENTLY READING this paragraph in) is meant to be an original serif typeface that an editor might want to set a textbook in. It does not yet have an official name. Many existing open source typefaces are clones of popular old public domain typefaces (like *Asana*, *Sitis*, *EB Garamond*, or *Tinos* again, respectively). Others like *Libertine Serif*, *Dijkl Vu*, and *Droid Serif* have a distinctive "computer type" style that makes them convenient for pixel display and easy to construct and adapt but poor in most other regards. I tried to create something different. If libre typography is to gain artistic respectability, it is important that we start creating more original, high quality designs instead of cloning existing typefaces.

What will this font contain?

MANY OPEN SOURCE TYPE PROJECTS HAVE AN UNREALISTIC EMPHASIS ON quantity over quality. Driven by internationalization concerns, contributors try to create a superfont that contains as many *glyphs* as possible (many hardly drawn), while neglecting other important features. Even the relatively well-designed, Cyrillic-centric approximately 4,300 glyphs, yet lacks old style figures and a bold weight. This typeface has a more limited, but *targeted* character set that covers the most common Western European and Latin languages. A handful of common Greek letters are also included. The regular style contains basic fra glyphs as well. This font includes thoughtfully designed *old style figures*, or "lowercase numerals", which are available in every style.

0123456789 /pɑɒ nɑnsi↑ɛfɔn/

Loremta *Loremta*
Loremta *Loremta*
Loremta *Loremta*

Character-wise, all styles currently support the core Adʊ set, Latin Supplement, and Latin A blocks, as well as the most important punctuation marks in General Punctuation and Math Symbols. A handful of common Greek letters are also included. The regular style contains basic fra glyphs as well. This font includes thoughtfully designed *old style figures*, or "lowercase numerals", which are available in every style.

This font was designed to accommodate common mathematical expressions that show up in many texts. Not all of the hundreds of mathematical symbols are covered, but the most important ones are. They also come in all four styles. Currently, except for the slab-serif *Dijk Vu*, the only free serif math fonts are clones (like *Asana* or *Sitis*). This font aims to become the first original open source true-serif math font.

$$\frac{-b \pm \sqrt{b^2 - 4ac}}{2a} \qquad \frac{-b \pm \sqrt{b^2 - 4ac}}{2a} \qquad \triangle ADB \sim \triangle CB$$

$$\cos\left(\frac{10\pi}{7}\right) \qquad \sum_{x=1}^{n} (2x^2 + 5) \qquad p \le q \leftrightarrow r \qquad \lim_{x \to \infty} f(x)$$

$$\Delta = \begin{vmatrix} 1 & 2 & -5 \\ 2 & 3 & -6 \\ \frac{1}{2} & \frac{1}{3} & \frac{1}{4} \\ 5 & 6 & -9 \end{vmatrix} \qquad \begin{array}{l} \cos(\Theta + \phi) - \cos\Theta\cos\phi - \sin\Theta\sin\phi \\ \\ \\ \end{array}$$

$$f'(x) = \frac{f(x+h) - f(x)}{h} \qquad \forall \dot{\alpha} = \{3, 4\} \quad \dot{\alpha} = 2.9\,\sigma$$

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Appropriate styles of the font contain *Mathematical* **Bold** and *Italic*, bold and italic glyphs embedded into a regular font, which allows it to be used with typesetting engines like Math ML.

It contains a full set of superscript figures (^{0123456789}) which are easily accessible through the opentype sequence "0123456789". This could replace the current undesirable practice of simply shrinking full size numerals into superscripts. Eventually this typeface may eventually include superscript letters and small capitals.

4^3 4^3

Current practice True superscripts

Why should Wikimedia help?

TO BE SUCCESSFUL, A TYPEFACE MUST HAVE A LARGE ORGANIZATION backing it. For commercial designs, this is usually the font foundry or even smaller independent studios have the distribution machinery, reach, and quality control to seriously release new typefaces. Large foundries like Adobe can push out new typefaces with even greater force. One of the reasons good open source typefaces are so rare is that type is rarely a priority for the technical-minded programmers running open source projects. When a quality free typeface does appear—usually because commissioned it for its own purposes and "source-opened" the binaries.

However, it is not without precedent that an libre-culture organization has sponsored the creation of a free typeface. Back in 2010, Canonical, the company behind Ubuntu, developed the Ubuntu font which became a cult favorite within the Linux community, though it made few critical waves. But in 2013, the Mozilla Foundation made critics' heads turn when it sponsored the creation of a comprehensive font family, *Fira Sans*, designed by Erik Spiekermann. *Fira* was not a bare-bones glyph bundle or a clone—it was an entirely original design build for serious typesetting, and was later expanded to include other styles. Its creation popularized overnight upgraded the status of libre typography, then considered by top designers as an artistic backwater at best, and a dangerous cesspool at worst. Libre typography, and libre organizations like Mozilla became respectable among artists. *Fira* was renowned both for its design, and the fact that no none other than the Mozilla Foundation had commissioned it. Matthew Butterick of *Typographica* (and author of *Practical Typography*) remarked that

> *Fira is still notable for the circumstances of its birth. It was commissioned by the Mozilla Foundation for the Firefox OS and released under the SIL Open Font License. So let's give the Mozilla Foundation credit for understanding that type is a valuable asset, putting a suitable budget behind the project, and hiring someone who knows what he's doing.*

Mozilla was motivated to back Fira because it wanted a quality UI typeface for its Firefox OS project and did not want to license a proprietary typeface for an open source operating system, or deal with existing open source typefaces which were simply becoming cliché (a la Open Sans). The Mozilla Foundation evidently saw enough value in such an investment that it bankrolled the entire typeface from start to finish. So why shouldn't the Wikimedia Foundation back a typeface too?

Of the four great libre *players* today—Ubuntu, Mozilla, and Wikimedia, plus Google—only the Wikimedia Foundation has never backed a font project, much less fund it. This makes little sense considering that Wikimedia also has as great a free user interest in typography. Yet it has ceded responsibility of this very important resource. For example, mathematics on Wikipedia still remain a problem in part due to issues with math fonts, and the "Special Characters" warning is still rampant on many articles. Wikipedia articles look different on every computer and browser. Typography is a mess for Commons illustrators who have no "go-to" typeface except the Sharetech Dijk Vu Sans. When Wikimedia attempted its "Typography Refresh" in 2014, it ran into—big surprise—font-related obstacles. It would seem that the Wikimedia Foundation ought to put a priority on making sure that typography blocks no convey its vast troves of prose are available. In addition, as a proponent of free culture, it ought to see value in paying new writers and designers everywhere have the typographical resources to express themselves. Wikimedia Commons exists in part to provide a free resource of Creative Commons images for anyone to use. Why not do the same for type?

How would Wikimedia help?

WIKIMEDIA WOULD NOT NECESSARILY EVEN HAVE TO FUND SUCH A project, in both it's policy of not paying for content. Wikipedia Commons was built by volunteer photographers, artists, and clerks. Wikimedia only provided the venue and distribution mechanism. The typeface you are reading right now is, after all, already in existence—what it needs is a *purpose* and a *home*. If a typeface does not have any reason to exist, it will die in obscurity and both the artist and the community are lose. For commercial typefaces, their *raison d'être* is to sell; for a libre typeface, it is to be used. This should not, of course be taken as meaning "free-as-in-beer". Fonts, even libre ones, are worth money, and to maintain such a large project I would probably need to solicit donations. It would also be good to open *source community* recognizing the value of type—now-a days a person can use copyleft tools to create or customize fonts, but content illustrated by copyleft images hosted by copyleft projects, which can be viewed freely through copyleft browsers on computers running copyleft operating systems. The only bottleneck is the stage where words must be converted to readable text, which requires a font. And there are few good copyleft fonts for this task. As of 2015, Ubuntu users must still download the *Microsoft core fonts* package post-installation to obtain a proper type library.

What's the plan?

THE TYPEFACE YOU SEE BEFORE RIGHT NOW HAS BEEN IN PRODUCTION since August 2014. As with *Fira* and any other typeface—open source or not—the design itself takes considerably artist-side.

The design phases: AaNni *Wordmarks* AaNni *Influencers'* AaNni *Typefaces*

As described above, this font is nearly "release-ready". The roadmap for the font might look something like this:

- :: Organize and document project
- :: Advertise project on-wiki
- :: Polish and name font, plan font release, messaging, and future objectives with community
- :: Set up web demo on GitHub and build release page
- :: **First release!**
- :: Send to reviewers like *Typographica*
- :: Post to diffusion websites like Dafont.com and Google Fonts to build popular audience
- :: Work with other Wikimedia contributors on font integration and deployment
- :: Expand writing system support with guidance from international Wikimedians
- :: **2.0 Release**

Mozilla operates less transparently than the Wikimedia projects do, so unlike *Fira*, a Wikimedia commissioned font would have to take a more democratic path. The font project would probably live on Commons, since fonts are similar to the other types of media that project hosts. Both typefaces and images are "building blocks" used to convey ideas, either of Wikipedians, or of other users. A typeface is simply a larger undertaking that requires more user input. If there is enough interest from Commons users or the Foundation itself, then we'd move ahead and establish project pages to provide basic information about the font's progress. The next step would be to issue a banner message alerting users to the existence of the font project, recruiting testers. It takes an artist to design a font, but a village to finish one. However it is important to note that while the font is open source in the way that it is being developed in the open on GitHub, it is not exactly open source in the way that everyone pitches in on the design. Fonts are more like a photograph or illustration on Commons—they resist collaboration, and *the role of the community is more critical and supervisory than contributive*. The community would test the font, plan its release and determine its roadmap. It could also *decide not to release it*. Then the community would provide the direction and the artist (in this case, me) would provide the design.

The font source itself would live on GitHub, as it does now. GitHub can also provide hosting for a more sophisticated font demo page than can be created with MediaWiki. The page will be the face of the font project, much like the *Fira* page the Carrois foundry has. And a well-built demo page, together with a link to Wikimedia, would lend legitimacy and momentum to the font project.

If Wikimedia hosts the font project, then type critics will likely take notice and provide professional evaluations of the font. This would raise its profile among the design community, and might also provide a model for other type designers to start their own open source font projects. Meanwhile diffusion on websites like Dafont.com and Google Fonts would build a popular audience for the font and yield potential donors.

On the Wikimedia-internal side, we would have to work on deploying and using the font. Wikimedia could adopt the font as its own branding typeface, replacing proprietary Gill or *Helvetica*. While Wikipedia articles at the moment specify no font and rely on local fonts on the reader's computer, there are plenty of places that do require an embedded font—such as Wikipedia's math display. For example, PDF bindings of WikiBooks currently contain the font *Latin Modern*, in lieu of quality commercial fonts that would have to be licensed. We can use Wikimedia's servers. *Latin Modern* is, of course, a poor choice for book typesetting, and the usage of a true text font that Wikimedia could call its own would be a significant improve these books greatly. And if there is an effort to make a more sophisticated WikiBook (like an open education textbook), typesetting is a good tool that would be mandatory. Beyond WikiBooks, there are countless other places Wikimedia could use the font. Wikipedia articles could even conceivably be standardized with an embedded webfont. Not to mention, Wikimedia would also be making available an invaluable resource for the whole world.

Finally, the font would grow to embrace more glyphs and writing systems. This is where the diverse nature of the Wikimedia projects truly becomes an asset. Because there are so many users of different backgrounds using the font in so many different contexts, it provides an impetus to expand the font to embrace more writing systems and glyphs. It would make sense to design Cherokee glyphs if it was known that they had some visible use. The presence of international users also provides a valuable knowledge base to consult with when designing foreign scripts like Greek or Cyrillic. The result would be a much more comprehensive typeface.

Wikimedia has spent years building a free library of information and media. It is high time that it expanded into the oft-neglected field of type. I hope that you like my font, and thank you for reading my proposal!

—**Kelvin**

* Very rarely, exotic typefaces can be protected by design patents, which last fourteen years, though such protection has also been granted to more utilitarian typefaces like Helvetica.